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Notice of Allowability	Application No.	Applicant(s)	
	09/994,199	KURKJIAN ET AL.	
	Examiner	Art Unit	
	Jennifer H Gay	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 4/26/05 and the examiner's amendment included herewith.
2. ☒ The allowed claim(s) is/are 1-38.
3. ☒ The drawings filed on 20 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>6/2/05</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>11/24/01</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jennie Salazar on 31 May 2005.

The application has been amended as follows:

In the Claims:

Claim 1, "at least one sample of material" in line 3 has been changed to --at least one coupon--, "the material" in line 4 has been changed to --the coupon--, "the at least one sample of material" in line 5 has been changed to --the at least one coupon--, "and" has been deleted from the end of line 6, --drawing formation fluid samples from the subterranean formation into the formation evaluation tool; and-- has been added after line 6, and "the at least one sample of material" in line 7 has been changed to --the at least one coupon--.

Claim 2, "the at least one sample of material" in line 2 has been changed to --the at least one coupon--.

Claim 3, "the at least one sample of material" in line 2 has been changed to --the at least one coupon--.

Claim 6, "the at least one sample of material" in lines 3 and 5 has been changed to --the at least one coupon--.

Claim 7, "the at least one sample of material" in line 1 has been changed to --the at least one coupon--.

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Claim 8, “the at least one sample of material” in line 2 has been changed to --the at least one coupon--.

Claim 9, “the at least one sample of material” in line 2 has been changed to --the at least one coupon--.

Claim 10, “at least one sample of material” in line 4 has been changed to --at least one coupon--, “the sample of material” in line 6 has been changed to the --coupon--, --drawing formation fluid samples from the subterranean formation into the formation evaluation tool; -- has been added after line 6, “the sample of material” in line 7 has been changed to --the coupon--, and “the sample of material” in line 9 has been changed to --the coupon--.

Claim 11, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

Claim 12, “a plurality of samples of material” in lines 1 and 2 have been changed to --a plurality of the at least one coupons-- and “the samples of material” in line 2 has been changed to --the coupon--.

Claim 13, “the at least one sample of material” in lines 3 and 6 has been changed to --the at least one coupon--.

Claim 15, “at least one sample of material” in line 4 has been changed to --at least one coupon--, “the sample of material” in line 5 has been changed to --the coupon--, --drawing formation fluid samples from the subterranean formation into the formation evaluation tool; -- has been added after line 5, “the sample of material” in line 6 has been changed to --the coupon--, and “the sample of material” in line 8 has been changed to --the coupon--.

Claim 16, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

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Claim 18, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

Claim 19, “at least one sample of material” in line 3 has been changed to --at least one coupon--, “the at least one sample of material” in line 6 has been changed to --the at least one coupon--, “the at least one sample of material” in line 11 has been changed to --the at least one coupon--, and “the at least one sample of material” in line 13 has been changed to --the at least one coupon--.

Claim 20, --for drawing fluid from a subterranean formation therein-- has been added after “formation evaluation tool” in line 1, “at least one sample of material” in line 3 has been changed to --at least one coupon--, “the at least one sample of material” in line 3 has been changed to the at least one coupon, and “the at least one sample of material” in line 6 has been changed to the at least one coupon.

Claim 21, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

Claim 23, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

Claim 26 has been cancelled.

Claim 27, “the at least one sample of material comprises removable coupons” in lines 1 and 2 has been changed to --the at least one coupon--.

Claim 28, “the at least one sample of material” in line 3 has been changed to --the at least one coupon--.

Claim 30, “the at least one sample of material” in line 2 has been changed to --the at least one coupon--.

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Claim 31, “the at least one sample of material” in line 2 has been changed to --the at least one coupon--.

Claim 32, --for drawing fluid from a subterranean formation therein-- has been added after “formation evaluation tool” in line 1.

Claim 33, “the at least one sample of material” in line 3 has been changed to --the at least one coupon--.

Claim 34, “the at least one sample of material” in line 2 has been changed to --the at least one coupon--.

Claim 35, --capable of drawing fluid from the subsurface formation therein, the formation evaluation tool-- has been added after “a formation evaluation tool” in line 3, “at least one sample of material” in line 3 has been changed to --at least one coupon--, and “the at least one sample of material” in line 5 has been changed to the at least one coupon.

Claim 36, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

Claim 38, “the at least one sample of material” in line 1 has been changed to --the at least one coupon--.

2. The following is an examiner’s statement of reasons for allowance:

Abercrombie (US 4,605,065) discloses a method and apparatus for monitoring hydrogen sulfide contents in wellbore fluid through the use of samples of materials or coupons placed within a formation evaluation tool within the wellbore. It is also disclosed that the coupons are optically inspected to determine the amount of hydrogen sulfide present in the wellbore fluid. It is not disclosed however that the tool is capable of drawing fluid from the surrounding formation; the coupons are merely placed in the path of flowing wellbore fluid.

Freitas (US 4,928,760) discloses a downhole coupon holder for measuring the corrosive properties of fluid injected into the wellbore. It is not disclosed that the coupons are specifically used to measure the presence of hydrogen sulfide nor that the tool is capable of being used as a formation evaluation tool. In the previous Office Action the examiner was mistaken in her assessment of the reference as Freitas is clearly used to measure the properties of injected fluid and not wellbore fluid or the surrounding formation.

GB 2344365 and Jiang et al. (US 2003/0134426) disclose a method and apparatus for detecting hydrogen sulfide in wellbore fluid. While the apparatus disclosed is capable of drawing fluid from the surrounding formation, the means for measuring the presence of hydrogen sulfide is a sample of material not a coupon. GB 2344365 and Jiang et al. disclose the use of iron oxide that is converted to iron sulfide when exposed to hydrogen sulfide to detect hydrogen sulfide in the wellbore fluid. While GB 2344365 was used in previous Office Actions to reject sampling of wellbore fluid as being an obvious step used with a reactive coupon, none of the references made of record are capable of or can be adapted to collect fluid samples. Further, it would not be obvious to use a coupon in the apparatus disclosed by GB 2344265 in place of the iron oxide particles as a coupon would not be free to react with the hydrogen sulfide in the same manner and to the same degree that the iron oxide particles would. The lack of relative surface area and the inability for the wellbore fluid to mix with a coupon would lead to an inaccurate measure of the quantity of hydrogen sulfide in the wellbore fluid.

Ford (US 5,095,977) discloses a method and apparatus for detecting hydrogen sulfide in wellbore fluid through the use of coupons placed within a holder in the wellbore. It is not disclosed that the tool is capable of drawing fluid into the tool and is actually shown in Figure 6 that the fluid merely flows past the coupon.

Regarding claims 1, 10, 15, and 19: The prior art of record fails to disclose or suggest a method for identifying the presence of hydrogen sulfide in a wellbore where the method uses a formation evaluation tool that houses at least one coupon optically reactive to hydrogen sulfide and is capable of drawing fluid from the formation into the tool as specifically called for in the claimed method.

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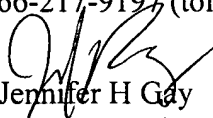
Regarding claims 20, 32, and 35: The prior art of record fails to disclose or suggest a formation evaluation tool that houses at least one coupon reactive to hydrogen sulfide and is capable of drawing fluid from the formation into the tool as specifically called for in the claimed combination.

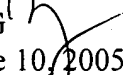
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Patent Examiner
Art Unit 3672

JHG 
June 10, 2005